

## Interactivity in Goodsalls' Rule and Fistula-in-ano

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### ABSTRACT

Fistula-in-ano is a tract lined by granulation tissue which opens deeply in the anal canal or rectum and superficially on the skin around the anus. Managing fistula-in-ano is a challenging task. Because recognizing the internal opening and cause of the fistula tract is difficult. Both external and internal openings of the fistula tract are essential for the complete identification of the tract. The purpose of the present study was to study the relevance between Goodsall's rule and course of the fistula tract. A sample of 106 patients with simple fistula was studied. In this study Hydrogen Peroxide was injected by using syringe through the external opening of the fistula and seen the appearance of air bubbles which are come out from the internal opening. The site and number of internal and external openings and the course of the tract were recorded. The median age of the participants was 37 years. The majority were male (57.54%). Thirty one point one percent (31.1%) showed intersphincteric fistula, 51.8% showed transsphincteric fistula and 16.9% had superficial fistula. The overall predictive accuracy of Goodsall's rule in studied group was 68.3%. It is significantly associated with the type of fistula. The high predictive accuracy in superficial fistula (94.4%), intersphincteric fistula (84.4%) and transsphincteric fistula (69.09%) were observed. It was concluded that, Goodsall's rule was not accurate in 31.7% of all fistulae; it can be used as a guide in locating the course of the tract and the internal opening.

**KEYWORDS:** Goodsalls' rule, fistula-in-ano, Sri Lankan population

### INTRODUCTION

Fistula-in-ano is a tract lined by granulation tissue which opens deeply in the anal canal or rectum and superficially on the skin around the anus (Cirocco et al., 1991). At present, several treatment modalities are being used by allopathic medicine to manage the fistula-in-ano. Managing fistula-in-ano is a challenging task. Because recognizing the internal opening and cause of the fistula tract is difficult. Both external and internal openings of the fistula tract are essential for the complete identification of the tract. David Henry Goodsall described a rule to explain the location of the fistula tract. Both external and internal openings of the fistula tract are essential for the complete identification of the tract.

David Henry Goodsall states that if external opening is situated in the posterior to the transverse anal line, at that time tract will open in to the midline posteriorly and if the external opening situated anterior to the transvers anal line at that time it usually associated with a radial tract (Ross et al., 1988). The purpose of the present study was to study the correlation between Goodsall's rule and course of the fistula tract.

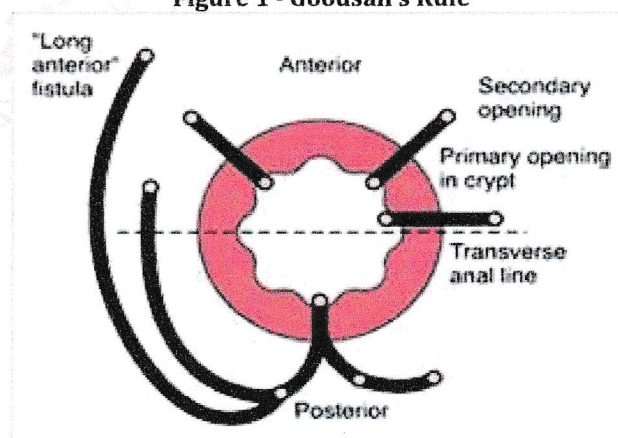
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Figure 1 - Goodsall's Rule



### Methodology:

Patients those who had simple fistula-in-ano were included in the study. Those who had following complex fistula were not considered for this study.

- Multiple fistula
- Horseshoe fistula
- tract length >10cm
- severe suppurative fistula
- Fistula with secondary causes; such as trauma, TB, carcinoma, Crohn's disease were excluded from the study.